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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/758,768	NGO ET AL.	
	Examiner	Art Unit	
	Alexandria Y. Bromell	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 4/7/05 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

3. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities:

5. Cross-Reference to related applications is not in the proper order or format. Cross-Reference to related applications should also indicate the reference by Patent Application Number. Appropriate corrections are required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims **1-22**, and **24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell III et al. (U.S. Patent 6597892), in view of Sasaki et al. (U.S. Patent Publication 20030014603), and further in view of Bodin et al. (U.S. Patent Publication 20040249826).

With respect to claim **1**:

A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a first information element in a device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

determining whether the first information element includes a first priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30);

storing the first information element in a first data structure when it is determined that the first information element includes the first priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]);

storing a second information element in the device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

determining whether the second information element includes a second priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30);

storing the second information element in a second data structure when it is determined that the second information element includes the second priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]);

transmitting a first message based on the first information element (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site**

stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182, Caldwell III et al., column 7, lines 46-49); and

after transmitting the first message, transmitting a second message based on the second information element, wherein an ordering of transmission is based on the first and second level priority indications (**If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124 of FIG. 1A**, Caldwell III et al., column 7, lines 49-53).

With respect to claim **2**:

A method according to claim 1, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (**in the data structure of this mode of operation, cached data may be managed in a queue**, Sasaki et al., [0112]).

With respect to claim **3**:

A method according to claim 1, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]).

With respect to claim **4**:

A method according to claim 1, further comprising:

determining whether a third information element absent from the device log includes a third priority level indication (**TICA Server will preempt existing command sequences to the satellite experiencing the event or any other satellites if the priority of those commands is below that of the TICA**, Caldwell III et al., column 5, lines 50-53);

storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]); and

after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first,

second, and third level priority indications (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182. If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124 of FIG. 1A**, Caldwell III et al., column 7, lines 46-53).

With respect to claim **5**:

A method according to claim 1, further comprising:

storing a fourth information element in the device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

determining whether the fourth information element includes the first priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30);

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and discarding the fourth information element from consideration of storage in the first data structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (**determining whether or not to cache data and storing the data in the cache memory**, Sasaki et al., [0034]).

With respect to claim **6**:

A method according to claim 1, wherein the first data structure and the second data structure are stored in a dynamic memory included in the tracked telemetry device (**The Neuron Chip is a system-on-a-chip with multiple processors, read-write and read-only memory (RAM and ROM)**, Bodin et al., [0049]), and the device log is stored in a flash memory included in the tracked telemetry device (**the chip has non-volatile**

memory for configuration data and for application programs, Bodin et al., [0049]).

With respect to claim **7**:

A method according to claim 1, further comprising:

receiving a request for data of the tracked telemetry device (**the Control site requests status of the current commanding state**, Caldwell III et al., column 9, lines 10-11); and

transmitting a data message based on content of the device log in response to the request (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182**, Caldwell III et al., column 7, lines 46-49).

With respect to claim **8**:

A telemetry device for prioritizing transmission of messages from the telemetry device, the telemetry device comprising:

a device log including a first information element and a second information element (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

a first data structure, other than the device log, including the first information element which includes a first priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30);

a second data structure, other than the device log, including the second information element which includes a second priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30); and

a processor configured to determine whether the first information element includes a first priority level indication, to determine whether the second information element includes a second priority level indication (**TICA Server will preempt existing command sequences to the satellite experiencing the event or any other satellites if the priority of those commands is below that of the TICA**, Caldwell III et al., column 5, lines 50-53), to transmit a first message based on the first information element, and after transmitting the first message, to transmit a second message based on the second information element, wherein an ordering of transmission is based on the first and second level priority indications (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182. If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124 of FIG. 1A**, Caldwell III et al., column 7, lines 46-53).

With respect to claim **9**:

A telemetry device according to claim 8, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (**in the data structure of this mode of operation, cached data may be managed in a queue**, Sasaki et al., [0112]).

With respect to claim **10**:

A telemetry device according to claim 8, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]).

With respect to claim **11**:

A telemetry device according to claim 8, wherein the processor is further configured to determine whether a third information element absent from the device log includes a third priority level indication (**TICA Server will preempt existing command sequences to the satellite experiencing the event or any other satellites if the priority of those commands is below that of the TICA**, Caldwell III et al., column 5, lines 50-53), to store the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (**storing or recording reaction log entries**, Bodin et al., [0263]); and

after transmitting the second message, to transmit a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182. If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124 of FIG. 1A**, Caldwell III et al., column 7, lines 46-53).

With respect to claim **12**:

A telemetry device according to claim 8, wherein the device log includes a fourth information element, and the processor is further configured to determine whether the fourth information element includes the first priority level indication to determine whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication (**storing or recording reaction log entries**, Bodin et al., [0263]), and to discard the fourth information element from consideration of storage in the first data structure when the determination of whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (**data processed by the caching policy having no available memory space cannot be stored even if there is enough space to store the data in the whole memory space**, Sasaki et al., [0016]).

With respect to claim **13**:

A telemetry device according to claim 8, further comprising:

a dynamic memory including the first data structure and the second data structure (**The Neuron Chip is a system-on-a-chip with multiple processors, read-write and read-only memory (RAM and ROM)**, Bodin et al., [0049]); and

a flash memory including the device log (**the chip has non-volatile memory for configuration data and for application programs**, Bodin et al., [0049]).

With respect to claim **14**:

A telemetry device according to claim 8, wherein the processor is further configured to receive a request for data of the tracked telemetry device (**the Control site requests status of the current commanding state**, Caldwell III et al., column 9, lines 10-11), and to transmit a data message based on content of the device log (**If not, then a**

determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182, Caldwell III et al., column 7, lines 46-49).

With respect to claim **15**:

A computer-readable medium carrying one or more sequences of one or more instructions for prioritizing transmission of messages from a telemetry device, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

storing a first information element in a device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]); determining whether the first information element includes a first priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30); storing the first information element in a first data structure when it is determined that the first information element includes the first priority level indication; storing a second information element in the device log; determining whether the second information element includes a second priority level indication; storing the second information element in a second data structure when it is determined that the second information element includes the second priority level indication;

transmitting a first message based on the first information element (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182**, Caldwell III et al., column 7, lines 46-49); and

after transmitting the first message, transmitting a second message based on the second information element, wherein an ordering of transmission is based on the first and second level priority indications (**If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124**

of FIG. 1A, Caldwell III et al., column 7, lines 49-53).

With respect to claim **16**:

A computer-readable medium according to claim 15, wherein the first data structure includes a first queue, the second data structure includes a second queue, and the device log includes a third queue (**in the data structure of this mode of operation, cached data may be managed in a queue**, Sasaki et al., [0112]).

With respect to claim **17**:

A computer-readable medium according to claim 15, wherein the first data structure is associated with the first priority level indication and the second data structure is associated with a second priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]).

With respect to claim **18**:

A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

determining whether a third information element absent from the device log includes a third priority level indication (**TICA Server will preempt existing command sequences to the satellite experiencing the event or any other satellites if the priority of those commands is below that of the TICA**, Caldwell III et al., column 5, lines 50-53);

storing the third information element in a third data structure when it is determined that the third information element includes the third priority level indication (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]); and

after transmitting the second message, transmitting a third message based on the third information element, wherein the ordering of transmission is further based on the first, second, and third level priority indications (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182. If on-board commands conflict, or if higher priority commands are scheduled as determined in decision blocks 176 and 178, then control of the satellite is deferred and processing continues with block 124 of FIG. 1A**, Caldwell III et al.,

column 7, lines 46-53).

With respect to claim **19**:

A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

storing a fourth information element in the device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

determining whether the fourth information element includes the first priority level indication (**If the TICA is enabled, as determined in decision block 158, then a determination is made as to whether the Monitor site is commanding an event on the satellite at a higher priority**, in decision block 160, Caldwell III et al., column 7, lines 27-30);

determining whether the first data structure includes storage available for storing the fourth information element when it is determined that the fourth information element includes the first priority level indication; and discarding the fourth information element from consideration of storage in the first data Structure when the step of determining whether the first data structure includes storage available determines that storage for storing the fourth information element is unavailable in the first data structure (**determining whether or not to cache data and storing the data in the cache memory**, Sasaki et al., [0034]).

With respect to claim **20**:

A computer-readable medium according to claim 15, wherein the first data structure and the second data structure are stored in a dynamic memory included in the tracked telemetry device (**The Neuron Chip is a system-on-a-chip with multiple processors, read-write and read-only memory (RAM and ROM)**, Bodin et al., [0049]), and the device log is stored in a flash memory included in the tracked telemetry device (**the chip has non-volatile memory for configuration data and for application programs**, Bodin et al., [0049]).

With respect to claim **21**:

A computer-readable medium according to claim 15, further including instructions for causing the one or more processors to perform the steps of:

receiving a request for data of the tracked telemetry device (**the Control site requests status of the current commanding state**, Caldwell III et al., column 9, lines 10-11); and

transmitting a data message based on content of the device log in response to the request (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182**, Caldwell III et al., column 7, lines 46-49).

With respect to claim **22**:

A method for prioritizing transmission of messages from a telemetry device, the method comprising:

storing a plurality of information elements in a device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

selectively storing each of a group of the plurality of information elements in one of a plurality of data structures based on a priority indicator associated with each one of the information elements of the group (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]);

and selecting one of the plurality of data structures based on one of the priority indicators; and transmitting a message including one of the information elements of the selected one of the data structures (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182**, Caldwell III et al., column 7, lines 46-49).

With respect to claim **24**:

An apparatus for prioritizing transmission of messages from a telemetry device, the apparatus comprising:

means for storing a plurality of information elements in a device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an "event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values**, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]);

means for selectively storing a group of each of the plurality of information elements in one of a plurality of data structures based on a priority indicator associated with each one of the information elements (**data items stored in a cache memory section are divided into groups of data each having a different access pattern, and the data items are prioritized**, Sasaki et al., [0020]); and

means for selecting one of the plurality of data structures based on one of the priority indicators; and means for transmitting a message including one of the information elements of the selected one of the data structures (**If not, then a determination is made as to whether the Monitor site is commanding an event on any satellite at a higher priority in decision block 178. If not, the Monitor site stops any lower priority commanding in block 180 and then opens/validates the command file, sets the RF transmit path and then transmits the command file to the satellite in block 182**, Caldwell III et al., column 7, lines 46-49).

8. Caldwell III et al. disclose a control system that provides a highly reliable means that automatically recognizes undesirable telemetry state changes and automatically transmits the required commands to the proper satellite to place the satellite operational parameters into the desired state (column 2, lines 21-25). Caldwell III et al., disclose storing elements, events, in a device log database (column 3, lines 54-60). Caldwell III et al. disclose determining which priority level the element has (column 7, lines 27-30). Caldwell et al. disclose transmitting messages based on the events (column 7, lines 46-49), and transmitting more messages based on the priority level of the event (column 7, lines 49-53). Caldwell III et al. disclose preempting command sequences to satellites

not experiencing events to determine if it has a high priority level (column 5, lines 50-53). Caldwell et al. disclose receiving a request for data of the tracked telemetry device (column 9, lines 10-11).

9. Caldwell III et al. does not disclose that elements are stored in memory based on their priority level, that the data structures may be managed in queues, whether or not to cache data and store the data, and if storage is available within a data structure .

10. Sasaki et al. disclose that elements are stored in memory based on their priority level [0020], and that the data structures may be managed in queues [0112]. Sasaki et al. disclose whether or not to cache data and store the data [0034], and if storage is available within a data structure [0016].

11. Sasaki et al. does not disclose storing elements in a device log, that data structures are stored in dynamic memory in the telemetry device, and that the device log is stored in flash memory.

12. Bodin et al. disclose creating a reaction log that includes detecting a change in a value or attribute of a device [0006]. Bodin et al., disclose storing elements in a device log [0263], that the data structures are stored in dynamic memory in the telemetry device [0049], and that the log is stored in flash memory in the telemetry device [0049].

13. Caldwell III et al., Sasaki et al., and Bodin et al. are analogous art because they are from the same field of endeavor of storing and managing information within a device.

14. At the time of invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Caldwell III et al., Sasaki et al., and Bodin et al. before him

or her, to modify the system for recognizing telemetry state changes and transmitting commands of Caldwell III et al., to include the priority storing system of Sasaki et al., and the event log of Bodin et al. because it is imperative to resolve problems for any set of telemetry states that should be automatically monitored for a device (Caldwell III et al., column 2, lines 6-10), with the information stored by priority efficiently (Sasaki et al., [0018], with a device log tracking the events occurring (Bodin et al., [0004]).

15. The motivation for doing so would have been to deploy a flexible device that allows the telemetry states of many devices to be monitored concurrently (Caldwell III et al., column 2, lines 6-10), storing and accessing information in a prioritized, logical manner (Sasaki et al., [0018]), with a device log that tracks the state changes through events (Bodin et al., [0004]). Therefore, it would have been obvious to combine Bodin et al., with Sasaki et al., and Caldwell III et al. to obtain the invention as specified in the instant claims.

16. Claims **23** and **25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell III et al. (U.S. Patent 6597892), in view of Sasaki et al. (U.S. Patent Publication 20030014603), further in view of Bodin et al. (U.S. Patent Publication 20040249826), and further in view of Ali et al. (U.S. Patent Publication 2003019769).

With respect to claim **23**:

A method according to claim 22, further comprising:

storing the plurality of data structures in a memory including the device log (**The TICA database is a user-created system configuration file containing the information that defines the default operational parameters for a TICA response. Each required response to a particular undesired state change, referred to as an**

"event", is assembled as an individual TICA Event Parameter Set, referred to as a "TICA record", containing the TICA parameter values, Caldwell III et al., column 3, lines 54-60), and (**storing or recording reaction log entries**, Bodin et al., [0263]), when an external power source of the telemetry device fails (**portable 610 (FIG. 6) supplies power for an embodiment of the docking station 660 without a battery when external power 668 is removed or fails**, Ali et al., [0077]).

With respect to claim **25**:

An apparatus according to claim 24, further comprising:

means for storing the plurality of data structures in a memory including the device log, when an external power source of the telemetry device fails (**portable 610 (FIG. 6) supplies power for an embodiment of the docking station 660 without a battery when external power 668 is removed or fails**, Ali et al., [0077]).

17. Caldwell III et al. disclose a control system that provides a highly reliable means that automatically recognizes undesirable telemetry state changes and automatically transmits the required commands to the proper satellite to place the satellite operational parameters into the desired state (column 2, lines 21-25). Caldwell III et al., disclose storing elements, events, in a device log database (column 3, lines 54-60). Caldwell III et al. disclose determining which priority level the element has (column 7, lines 27-30).

18. Caldwell III et al. does not disclose that elements are stored in memory based on their priority level, that the data structures may be managed in queues, whether or not to cache data and store the data, and if storage is available within a data structure. Caldwell III et al. does not disclose supplying power without a battery when external power is removed or fails

19. Sasaki et al. disclose that elements are stored in memory based on their priority level [0020], and that the data structures may be managed in queues [0112]. Sasaki et

al. disclose whether or not to cache data and store the data [0034], and if storage is available within a data structure [0016].

20. Sasaki et al. does not disclose storing elements in a device log, that data structures are stored in dynamic memory in the telemetry device, that the device log is stored in flash memory, or that power is available when external power fails.

21. Bodin et al. disclose creating a reaction log that includes detecting a change in a value or attribute of a device [0006]. Bodin et al., disclose storing elements in a device log [0263], that the data structures are stored in dynamic memory in the telemetry device [0049], and that the log is stored in flash memory in the telemetry device [0049].

22. Bodin et al. does not disclose supplying power without a battery when external power is removed or fails.

23. Ali et al. disclose a device that supplies power without a battery when external power is removed or fails [0077].

24. Caldwell III et al., Sasaki et al., Bodin et al., and Ali et al. are analogous art because they are from the same field of endeavor of storing and managing information within a device.

25. At the time of invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Caldwell III et al., Sasaki et al., Bodin et al., and Ali et al. before him or her, to modify the system for recognizing telemetry state changes and transmitting commands of Caldwell III et al., to include the priority storing system of Sasaki et al., and the event log of Bodin et al. with the emergency power system of Ali et al. because it is imperative to resolve problems for any set of telemetry states that

should be automatically monitored for a device (Caldwell III et al., column 2, lines 6-10), with the information stored by priority efficiently (Sasaki et al., [0018], with a device log tracking the events occurring (Bodin et al., [0004]), that is accessible when the device power is removed or fails (Ali et al., [0077]).

26. The motivation for doing so would have been to deploy a flexible device that allows the telemetry states of many devices to be monitored concurrently (Caldwell III et al., column 2, lines 6-10), storing and accessing information in a prioritized, logical manner (Sasaki et al., [0018]), with a device log that tracks the state changes through events (Bodin et al., [0004]), that is accessible when the device power is removed or fails (Ali et al., [0077]). Therefore, it would have been obvious to combine Boldin et al., with Sasaki et al., and Caldwell III et al. to obtain the invention as specified in the instant claims.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Genovese discloses a system and method for hazardous incident decision support and training (U.S. Patent 7194395).

Hein et al. disclose an algorithm for prioritization of event datum in generic asynchronous telemetric streams (U.S. Patent Publication 20020178275).

Sim discloses a queue management system (U.S. Patent Publication 20030093167).

Zellner discloses associated systems and methods for providing data services using idle cell resources (U.S. Patent Publication 20040125800).

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandria Y. Bromell whose telephone number is 571-270-3034. The examiner can normally be reached on M-R 6:30-5.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-0233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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